EasyNote T5 series Disassembly Manual

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For Packard Bell
A division of NEC Computers International B.V.

Packard Bell

Table of contents

Overview....3
Technician Notes....3
Disassembly Instructions....3
Reassembly Instructions....3
Required Tools....3
Hazardous Voltage....4
Avoid Electrostatic Discharge....4
Power Supply Unit....4
Removing the Battery....5
Removing the Hard Disk Drive....5
Removing the MDC Modem Module....6
Removing the Keyboard Cover....7
Removing Keyboard....7
Removing the Optical drive & Heat plate....8
Removing the Memory Module....10
Removing the Wireless Module....10
Removing Heat Sink & CPU....11
Removing the LCD Module....12
Removing the LCD Penal....14
Removing the Top Cover....16
Removing the Touch Pad....18
Removing the DC/DC Board....19
Removing the Main Board....20
DIP Switch Setting....22
Screws....23
Notice....24

Overview

This document contains step-by-step disassembly instructions for the EasyNote T5 chassis. The instructions are illustrated where necessary with images of the part that is being removed or disassembled. Furthermore, the screws that are removed are shown next to the image of the parts themselves.

Packard Bell reserves the right to make changes to the EasyNote T5 chassis without notice.

Technician Notes

Only technicians authorized by NEC Computers International B.V. should attempt to repair this equipment. All troubleshooting and repair procedures are detailed to allow only subassembly/module level repair. Because of the complexity of the individual boards and subassemblies, no one should attempt to make repairs at the component level or to make modifications to any printed wiring board. Improper repairs can create a safety hazard. Any indication of component replacement or printed wiring board modifications may void any warranty or exchange allowances.

Disassembly Instructions

When disassembling the system unit, follow these general rules:

- Do not disassemble the system into parts that are smaller than those specified in the instructions.
- Label all removed connectors. Note where the connector goes and in what position it was installed.
- Turn off the power and disconnect all power and all options.

Reassembly Instructions

Reassembly is the reverse of the disassembly process. Use care to ensure that all cables and screws are returned to their proper positions. Check that no tools or any loose parts have been left inside the chassis. Check that everything is properly installed and tightened.

Required Tools

All disassembly procedures can be performed using the following tools:

- PH 0x60 Philips screwdriver
- PH 0x40 Philips screwdriver
- 4.0 x 60 Flat screwdriver
- 2.0 x 30 Flat screwdriver
- SW5,0 Spacer screwdriver
- Small tweezers

Hazardous Voltage

There is hazardous voltage present inside the computer when it is connected to an AC supply, even when the computer's power switch is off. Exposure to hazardous voltage could cause personal injury. To avoid risk of injury, contact an Authorized Service Provider for proper (un)installation of optional hardware devices.

Avoid Electrostatic Discharge

Electrostatic electricity can easily damage circuit cards and integrated circuits (ICs). To reduce risk of damage, store them in protective packaging whenever they are not installed in your system.

Add-in cards can be extremely sensitive to ESD and always require careful handling. After removing the card from the computer, place the card flat on a grounded, static-free surface, component-side up. Use a conductive foam pad if available, but not the card wrapper. Do not slide the card over any surface.

Before you install or remove memory modules, video memory, disk drives, circuit cards or other devices, protect them from static electricity. To do so, make sure your computer's power switch is OFF. Then, unplug the computer's AC power cord. Before picking up the device you (un)install, you should wear an anti-static wrist wrap (available at electronic supply stores). Be sure to connect the wrist wrap to an unpainted metal portion of the computer chassis. As an alternative, you can dissipate electrostatic build-up by touching an unpainted metal portion of the computer chassis with one hand. Then touch the device you are (un)installing with the other hand, and maintain continuous contact with it until it is (un)installed in the computer.

Power Supply Unit

Under no circumstances should you attempt to disassemble the power supply. The power supply contains no user-serviceable parts. Inside the power supply are hazardous voltages that can cause serious personal injury. Always return a defective power supply to your dealer.

WARNING
Ensure that the computer is disconnected from its power source and from all telecommunications links, networks, or modem lines whenever the chassis cover is removed. Do not operate the computer with the cover removed.

AVERTISSEMENT
Assurez-vous que le système est débranché de son alimentation ainsi que de toutes les liaisons de télécommunication, des réseaux, et des lignes de modem avant d'enlever le capot. Ne pas utiliser le système quand le capot est enlevé.

WARNUNG
Das System darf weder an eine Stromquelle angeschlossen sein noch eine Verbindung mit einer Telekommunikationseinrichtung, einem Netzwerk oder einer Modem-Leitung haben, wenn die Gehäuseabdeckung entfernt wird. Nehmen Sie das System nicht ohne die Abdeckung in Betrieb.

ADVERTENCIA
Asegúrese de que cada vez que se quite la cubierta del chasis, el sistema haya sido desconectado de la red de alimentación y de todos lo enlaces de telecomunicaciones, de red y de líneas de módem. No ponga en funcionamiento el sistema mientras la cubierta esté quitada.

WAARSCHUWING
Zorg er voor dat alle verbindingen van en naar de computer (stroom, modem netwerk, etc) verbroken worden voordat de behuizing geopend wordt. Zet de computer nooit aan als de behuizing geopend is.

AVVERTENZA
Prima di rimuovere il coperchio del telaio, assicurarsi che il sistema sia scollegato dall'alimentazione, da tutti i collegamenti di comunicazione, reti o linee di modem. Non avviare il sistema senza aver prima messo a posto il coperchio

Removing the Battery

Perform the following steps to remove the battery:

1. Make sure to power off the EasyNote T5 *first*.
2. Turn the unit upside down.
3. Unlock the battery and slide it out of its place as the arrow shows in Fig. 1

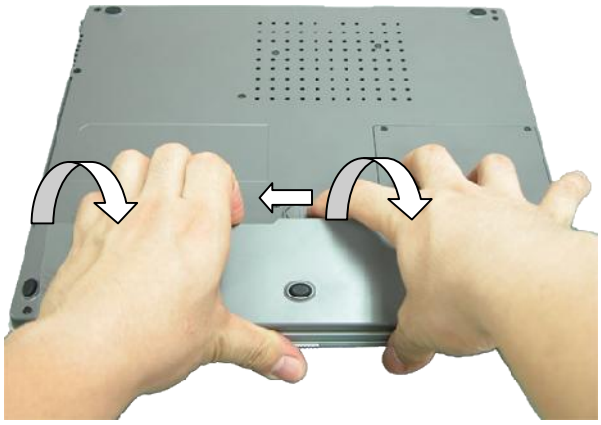
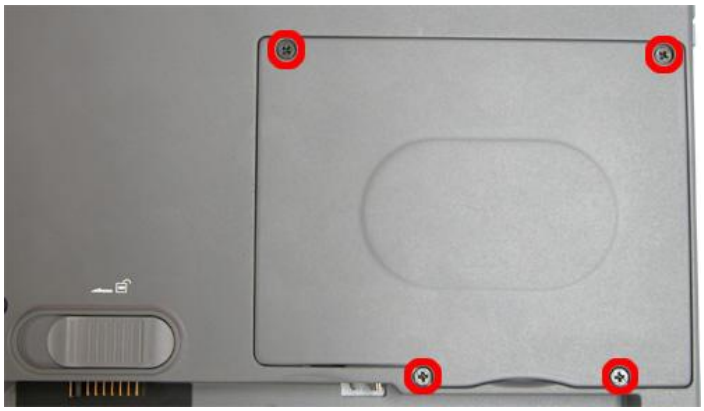


Fig. 1 *Removing the battery*

Removing the Hard Disk Drive

To remove the hard disk drive, first remove the battery (see *Removing the Battery*), then perform the following steps:

1. Remove the screws as shown in Fig. 2



M2.5x11 Black

Fig. 2 *Removing the Hard disk drive cover*

2. Lift up the hard disk drive and disconnect it as shown in Fig. 3

Fig. 3 *Disconnecting the hard disk drive*

3. Unscrew the four screws on both sides of the hard disk drive as shown in Fig. 4

M3x4 Black

Fig. 4 *Unscrewing the hard disk drive bracket screws*

Removing the MDC Modem Module

To remove the MDCmodem module, first remove the hard disk drive (see *Removing the Hard Disk Drive*), then perform the following steps:

1. Remove the screw shown in Fig. 5

M2.5x3.5 Sliver

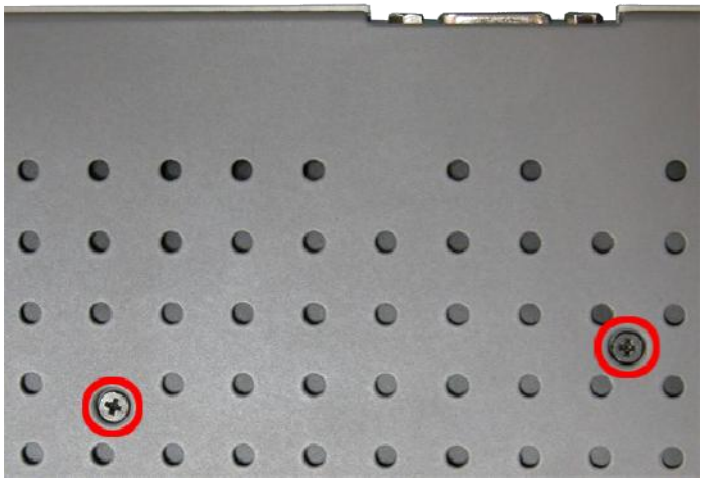
Fig. 5 *Removing the screws on the MCD modem*

2. Carefully lift up MDC modem module.
3. Disconnect the cable attached to the MDC modem and put the modem aside.

Removing the Keyboard Cover

To remove the Keyboard Cover , first remove the battery (see *Removing the Battery*), then perform the following steps:

1. Remove the screw as shown in Fig. 6



M2x15 Black

Fig. 6 *Removing Keyboard Cover screws*

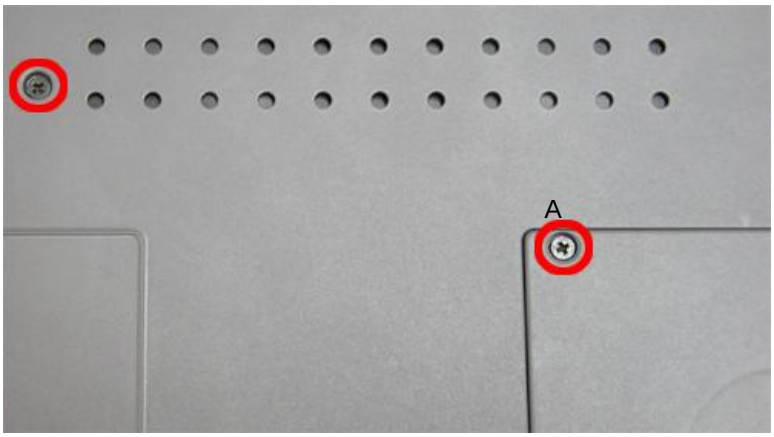
2. Remove the Keyboard Cover as shown in Fig. 7

Fig. 7 *Removing the Keyboard Cover*

Removing the Keyboard

To remove the Keyboard module, first remove the keyboard cover (see *Removing keyboard cover*), then perform the following steps:

1. Remove the screws as shown in Fig. 8



M2.5x11 Black

Fig. 8 *Removing the screws holding the keyboard*

Note: The screw “A” located on the hard disk slot cover holds the hard disk drive and the keyboard.

2. Carefully lift up the keyboard.
3. Release the keyboard FPC cable as shown in Fig. 9 and put the keyboard aside

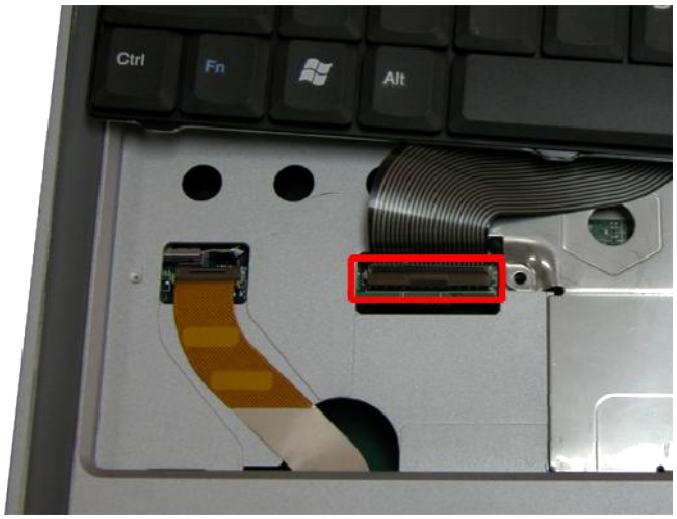
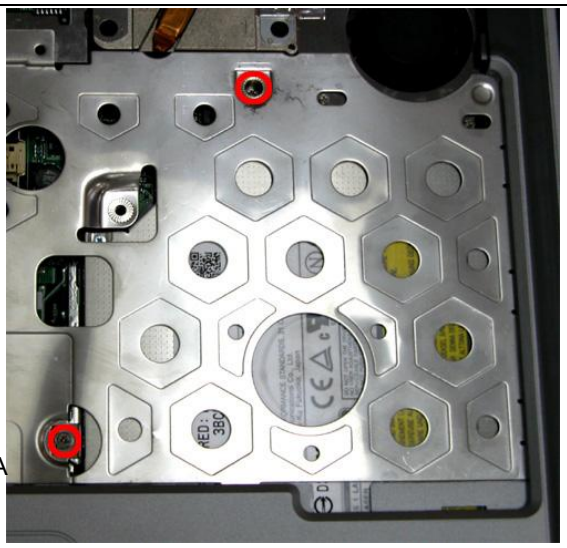


Fig. 9 *Removing the keyboard FPC cable*

Removing the Optical drive & Heat plate

To remove the optical drive & heat plate, first remove the keyboard cover (see *Removing the keyboard cover*), remove the keyboard (see Removing the keyboard) then perform the following steps:

1. Remove the screw as shown in Fig. 10



M2.3 x 6 Sliver

Fig. 10 *Removing the screws on Heat Plate*

Note: If you want to disassemble the Optical Drive, you are required to release Screw “A” only.

2. Push the Optical Drive module out from the base unit as shown in Fig. 11

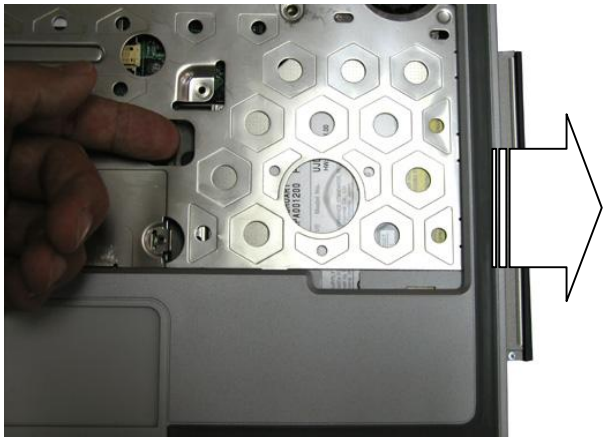


Fig. 11 *Pushing Optical Drive module out from base unit*

3. Carefully remove the heat plate from the base unit.

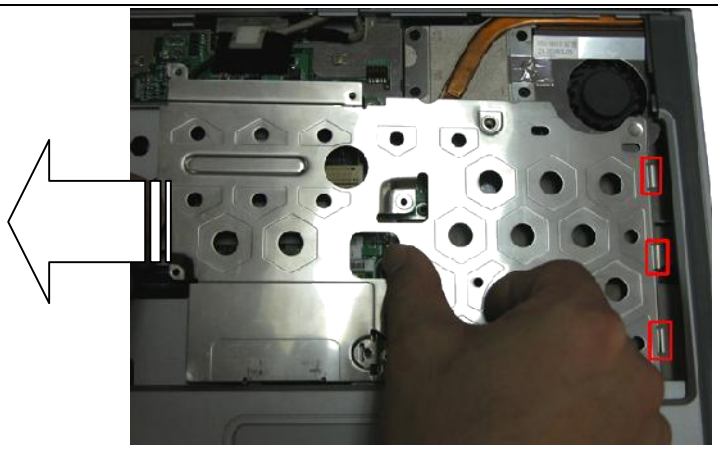


Fig. 12 *Removing Heat plate from base unit*

Note: When assembling the heat plate, make sure that these three hocks on the heat plate are properly inserted into the openings located on the top cover.

Removing the Memory Module

To remove the memory module, first remove the Keyboard cover (see *Removing the keyboard cover*), remove the keyboard (see Removing the keyboard), remove heat plate (see Removing heat plate) then perform the following steps:

1. Unclip memory module as shown in Fig. 13

Fig. 13 *Removing the memory module*

2. Remove the Memory Module from its slot and put it aside.

Removing the Wireless Module

To remove the Wireless Module, first remove the keyboard cover (see *Removing the keyboard cover*), remove the keyboard (see Removing the keyboard), remove the heat plate (see

Removing heat plate), then perform the following steps:

1. Disconnect the wireless antenna connectors as shown in Fig. 14

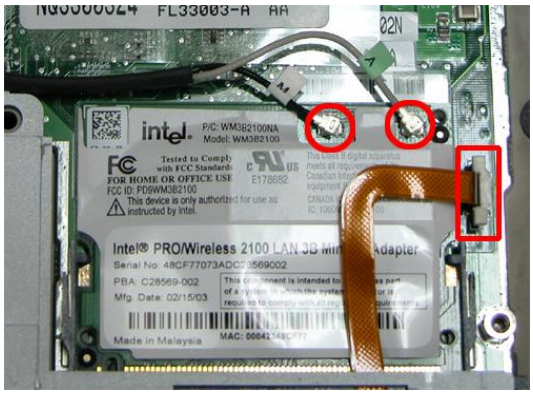


Fig. 14 *Disconnecting the wireless antenna*

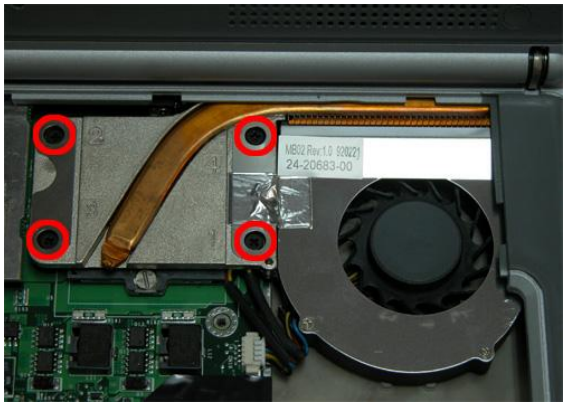
Note: You might consider disconnecting the touch pad flat cable before removing the wireless module.

2. Unclip the wireless module to release it from slot and put it aside.

Removing Heat Sink & CPU

To remove the Heat Sink & CPU, first remove the Keyboard Cover (see *Removing the keyboard cover*), remove the keyboard (see Removing the keyboard), remove optical drive & heat plate (see Removing optical drive & heat plate) then perform the following steps:

1. Release the screws on the heat sink in descending order (4→3→2→1) as shown in Fig. 15



M2.5x11 Black

Fig. 15 *Releasing the heat sink screws*

Note: When assembling the heat sink, tighten the heat sink screws according to the ascending order (1→2→3→4). This is to ensure a well distributed pressure over the CPU and to prevent damaging the CPU

2. Carefully remove the heat sink from the CPU socket as shown in Fig. 16

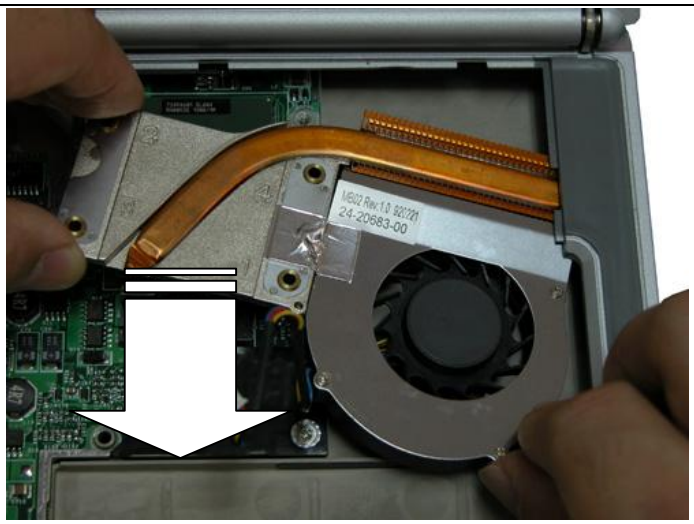


Fig. 16 *Removing the heat sink*

3. Use flat screws driver to release the CPU from the CPU socket; carefully lift up the CPU and put it in a safe place.

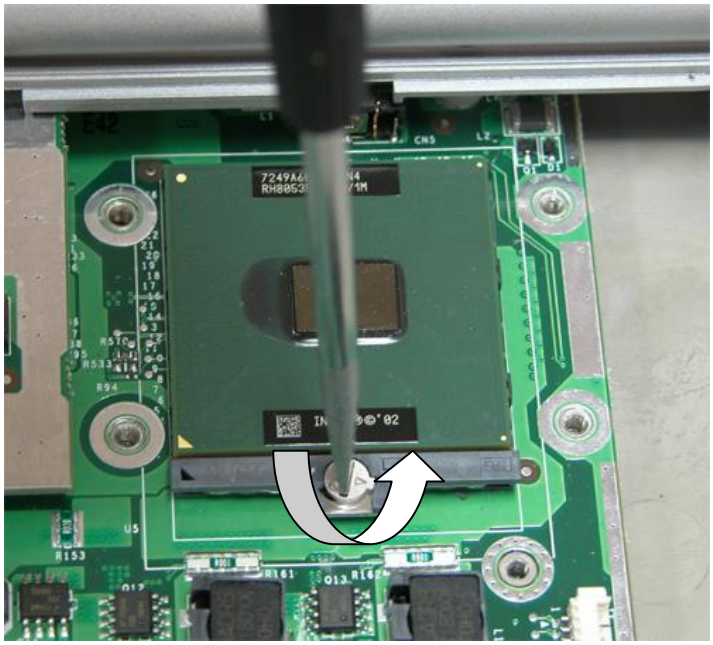


Fig. 17 *Releasing the CPU*

Removing the LCD Module

To remove the LCD Module, first remove the Keyboard Cover (see *Removing the keyboard cover*) then remove the keyboard (see Removing the keyboard) and disconnect the wireless antenna cables (see Removing the Wireless Module).

1. Unscrew the two LCD connector screws and also, disconnect the speaker connector as shown in Fig. 18

Fig. 18 *Disconnecting the LCD & speaker connectors*

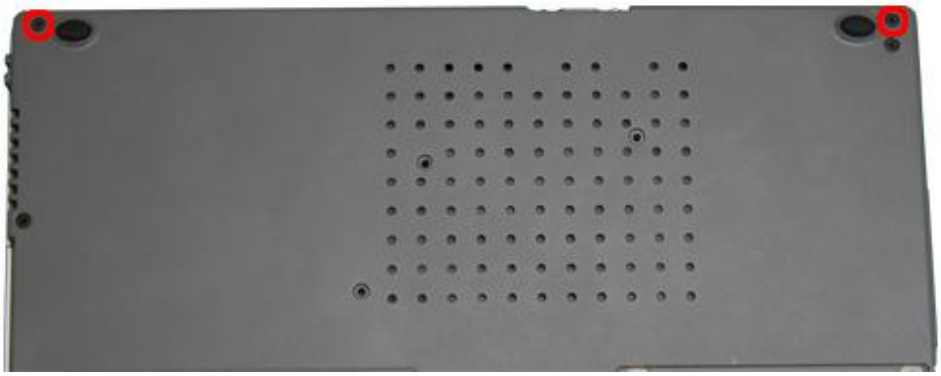
2. Remove the LCD cable cover with a small flat screws driver as shown in Fig. 19 .

Fig. 19 *Removing the LCD cable Cover*

3. Release the screws at rear side of the unit as shown in Fig. 20

Fig. 20 *LCD hinge screws at the rear*

4. Unscrew the two screws located on the bottom of the unit as shown in Fig. 21



M2x6 Black

Fig. 21 *LCD hinge screws at the bottom*

5. Carefully lift the LCD module out of the system and put it aside.

Removing the LCD Panel

To remove the LCD Panel, first remove the LCD Module (see *Removing the LCD Module*), then perform the following steps:

1. Unscrew all screws shown in Fig. 22

Fig. 22 *Screws on the LCD Module*

A = M2x3.5 Silver

B= M2x5 Silver

2. Relase the LCD Bezel carefully and put it aside as shown in Fig. 23

Fig. 23 *Removing the LCD Bezel*

3. Unscrew all screws encircled in Fig. 24 disconnect the inverter board and put it aside.

Fig. 24 *Removing the inverter board screws*

M2x5 Silver

M2x3.5 Silver

4. Carefully lift up LCD panel and disconnect the LCD cable from the penal.
5. Remove the screws at both sides of the LCD panel in order to release the LCD hinges as shown in Fig. 25 .

Fig. 25 *Removing the LCD Panel hinges*

Removing the Top Cover

To remove the Top Cover, first remove the Keyboard Cover (see *Removing the keyboard cover*), remove the keyboard (see Removing the keyboard), remove the LCD module (see Removing the LCD Module) then perform the following steps:

1. Disconnect the MIC connector on the DC/DC board.
2. Release all screws shown in Fig. 26

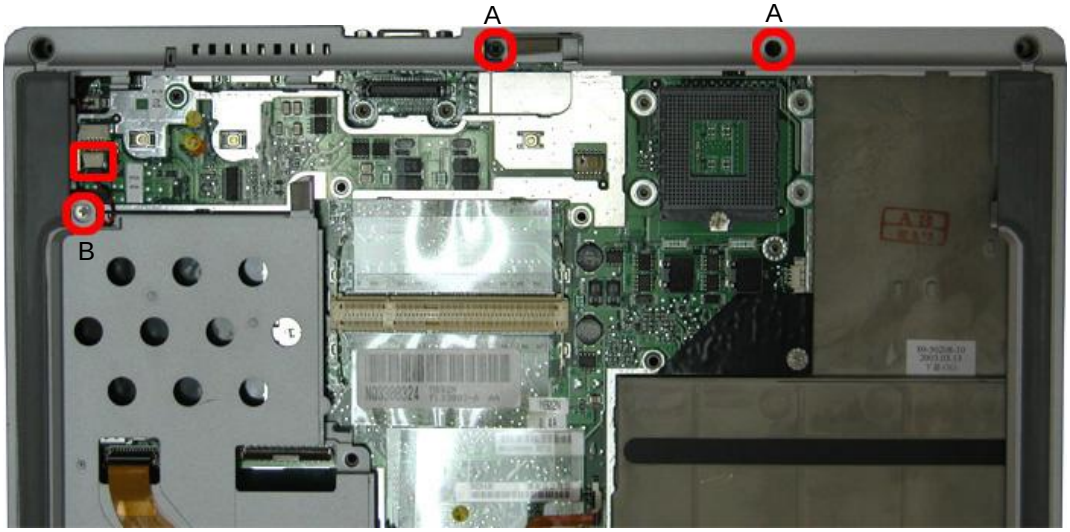


Fig. 26 *Removing the Top cover screws*

3. Flip over the unit and remove the screws as shown in Fig. 27

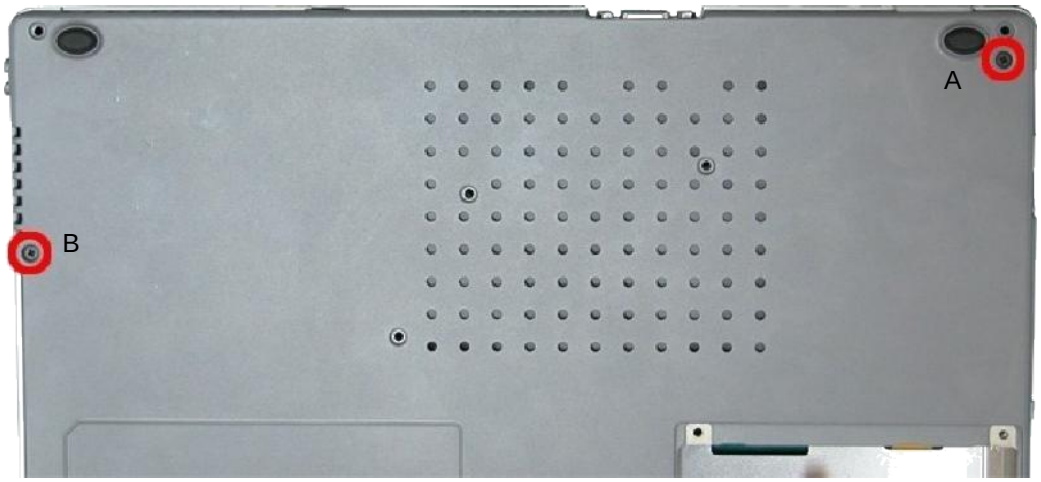


Fig. 27 *Removing the Top cover screws on the bottom of the system*

4. Remove all screws in the battery compartment as shown in Fig. 28

A = M2x6 Black

B = M2.5x12.5 Silver

A = M2x15 Black

B = M2.5x11 Black

M2x3 Sliver

Fig. 28 *Battery Compartment*

5. Carefully lift up and release the top cover and put it aside.

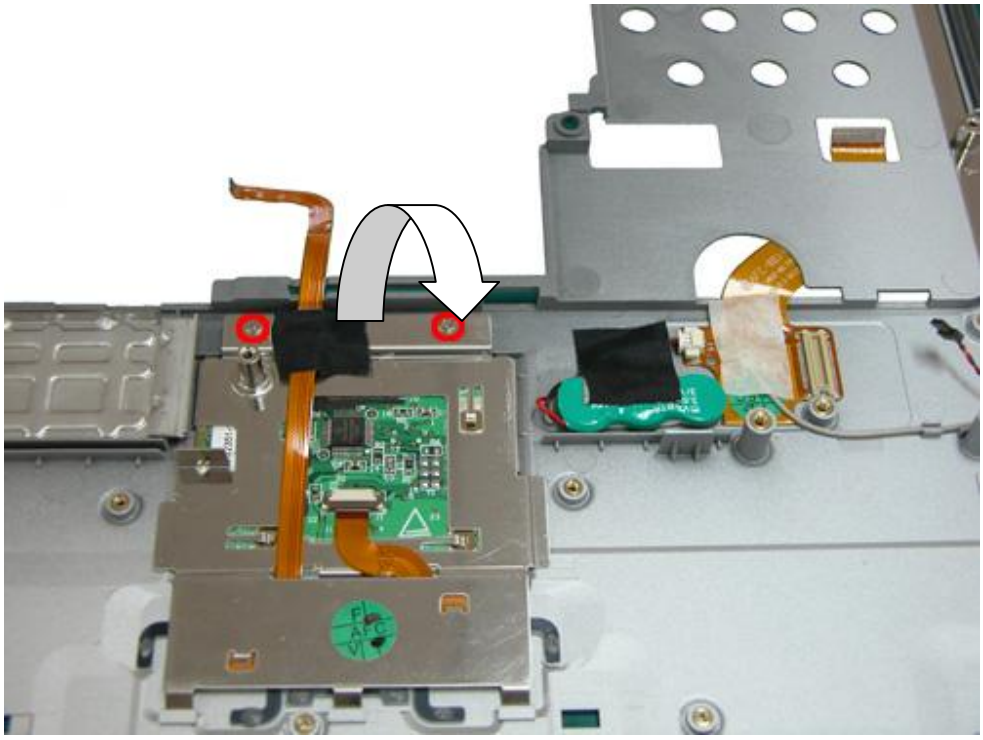
Fig. 29 *Removing the top cover*

Note: Remember to disconnect the touch pad cable before lifting up the top cover. On the VGA connector area use extra care to release the top cover.

Removing the Touch Pad

To remove the Touch Pad, first remove the Top Cover (see *Removing the Top Cover*), then perform the following steps:

1. On the other side of the top cover unscrew the two screws on the Touch Pad assembly as shown in Fig. 30 and remove the Touch Pad assy from the palm rest.



M2x3.5 Silver

Fig. 30 *Touch Pad Assembly*

Removing the DC/DC Board

To remove the DC/DC board, first remove the Top Cover (see *Removing the Top Cover*), then perform the following steps:

1. Remove the screw on the DC/DC board as shown in Fig. 31

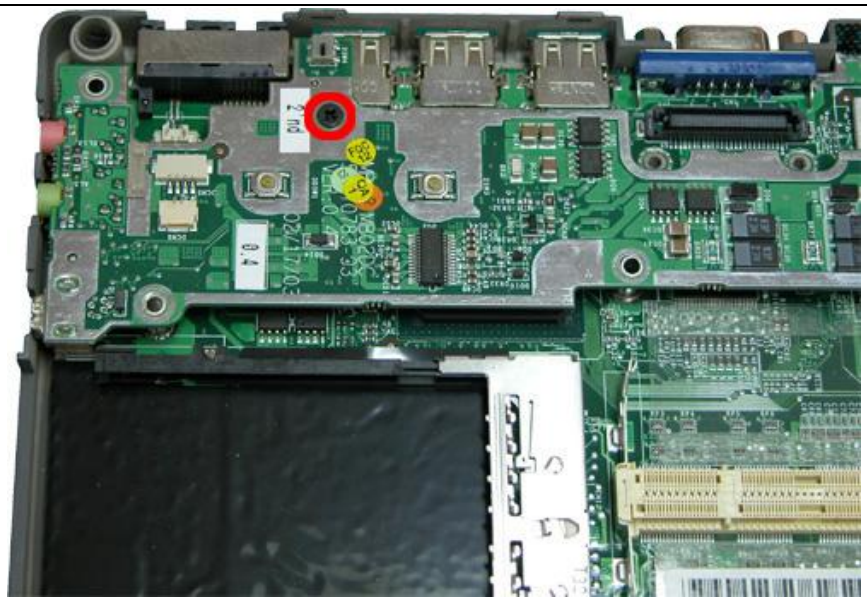


Fig. 31 *DC/DC Board*

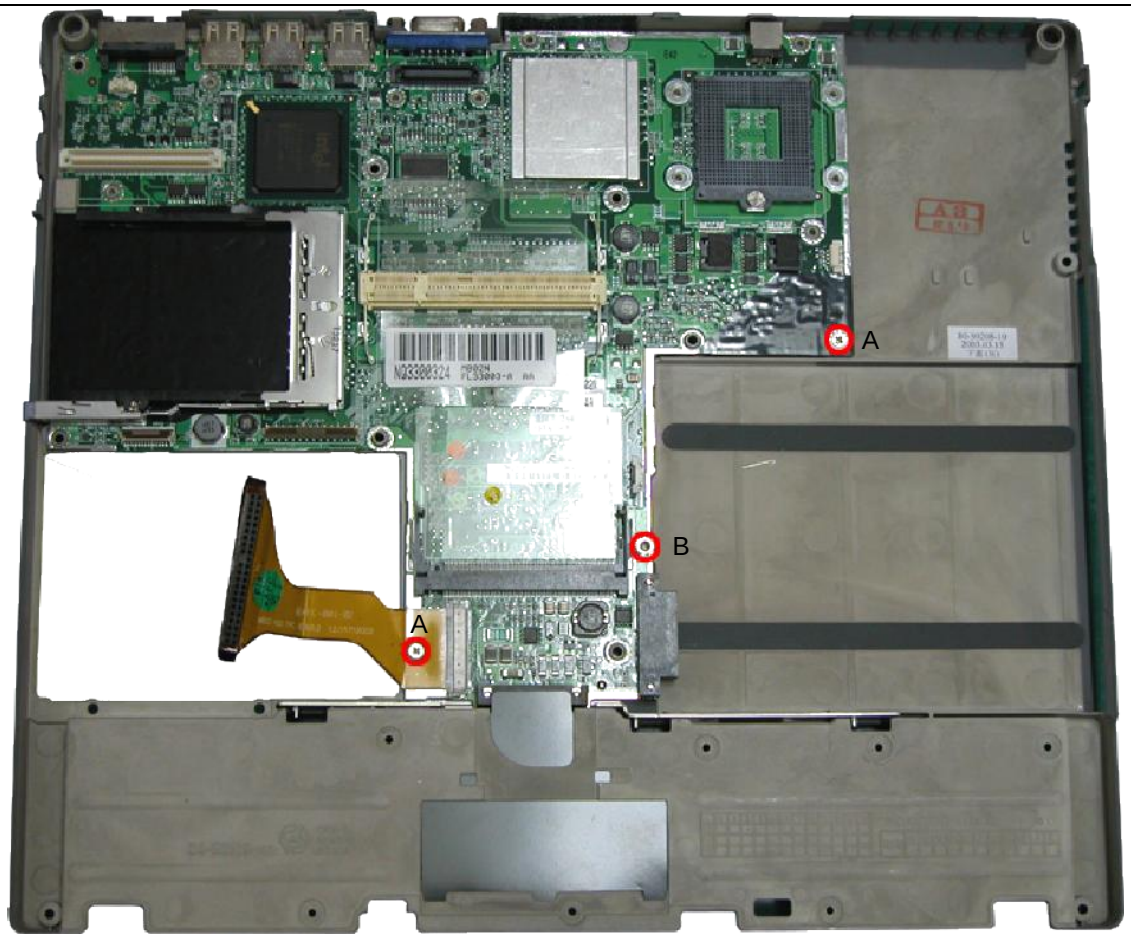
2. Carefully remove the DC/DC board as shown in Fig. 32 and put it aside.

Fig. 32 *Removing the DC/DC Board*

Removing the Main Board

To remove the Main board, first open the Top Cover (see *Removing the Top Cover*), remove DC/DC board (see Removing DC/DC board) then perform the following steps:

1. Remove the screws holding the main board in place as shown in Fig. 33



A = M2x5
Silver

B = M2.5x8
Silver

Fig. 33 *Removing the main board screws*

M2.5x10 silver

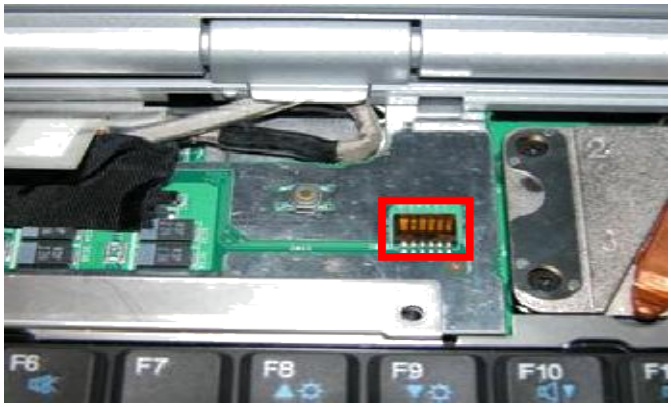
2. Disconnect the VGA connector from the base as shown in Fig. 34

Fig. 34 *Disconnecting the VGA connector*

3. Lift the main board out of the system and put it aside (Fig. 35).

Fig. 35 *Removing Main Board*

DIP Switch Settings



Dip Switch	Description	Seeting
Bit1	Keyboard Select1	Refer to the below table
Bit2	Keyboard Select2	Refer to the below table
Bit3	Reserved	Reserved
Bit4	BIOS Crisis	ON : Enable OFF: Normal (Default)
Bit5	DVDSEL	ON : connect to GND OFF : NC
Bit6	Password	Password override. ON: Override OFF: Available (factory setting)

Bit 1	Bit 2	Keyboard code
OFF	OFF	US Keyboard
ON	OFF	JP Keyboard
OFF	ON	Reserved
ON	ON	UK Keyboard

Screws

M2.5x5.6 Silver	**M2.5x3.5 Silver**	**M2.5x8 Sliver**	**M2.5x10 Silver**
M2.5x11 Black	**M2.5x12.5 Silver**	**M2.5x15 Black**	**M2x3 Sliver**
M2x6 Black	**M3x4 Black**	**M2.5x5 Sliver**	

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1.0	September 2003	Allen Koay (S&S Penang)	NEC Computers Malaysia*
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2.1	March 2005	Dean Egberts (S&S)	Packard Bell Europe*

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